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5 February 2007

Dr. Karl Longley, Chairman
Ms. Pamela Creedon, Executive Officer
Mr. Kenneth Landau, Assistant Executive Officer
Mr. Dave Carlson, Env. Program Manager, NPDES
Mr. James Marshall, Sr. WRCE
Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6144

VIA: Electronic Submission
Hardcopy if Requested

RE: Tentative Waste Discharge Requirements and Cease and Desist Order for Sterling Caviar LLC, Sacramento County

Dear Messrs Longley, Landau, Carlson, Marshall and Ms. Creedon:

The California Sportfishing Protection Alliance, Watershed Enforcers and San Joaquin Audubon (CSPA) has reviewed the Central Valley Regional Water Quality Control Board's (Regional Board) tentative NPDES permit and Cease and Desist Order (Order or Permit) for Sterling Caviar LLC (Discharger) and has the following comments.

CSPA requests designated party status for this proceeding. CSPA is a 501(c)(3) conservation and research organization established in 1983 for the purpose of conserving, restoring, and enhancing the state's fishery resources and their aquatic ecosystems and associated riparian habitats. CSPA has actively promoted the protection of water quality and fisheries throughout California before state and federal agencies, the State Legislature and Congress and regularly participates in administrative and judicial proceedings on behalf of its members to protect, enhance, and restore water quality and aquatic resources. CSPA members reside, boat, fish and recreate in and along waterways throughout the Central Valley, including Sacramento County.

In the proposed Permit the Regional Board establishes an unparalleled level of absurdity in stating that because Sterling Caviar has discharged illegally for a period of time; the discharge of waste to surface water does not constitute a "new" discharge. This is apparently done to circumvent regulatory and legal requirements that "new" discharges must be fully compliant upon initiation of the discharge. This is not a pre-CEQA, pre-Clean Water Act, pre-Porter Cologne discharge. The proposed Permit states that the Discharger provides best practicable treatment and control of the discharge (BPTC), yet the discharge is currently non-compliant with the proposed limitations and has not been characterized for priority pollutants. Contrary to good engineering and BPTC

requirements, the proposed Permit actually states, "The solid waste removed by the drum filters is reintroduced into the wastewater flow prior to discharge." Our specific comments are as follows:

1. The Proposed Compliance Schedules for the new or recommencing discharge included in the proposed Permit and Cease and Desist Order violate the California Toxics Rule (CTR) the SIP and Federal Regulations.

Despite that the Discharger has been discharging illegally, the discharge is a New Source subject to New Source requirements. The California Toxic Rule (CTR), page 31703 Federal Register/Vol 65, No. 97, states "[a] 'new California discharger' includes 'any building, structure, facility, or installation from which there is, or may be, a discharge of pollutants', the construction of which commences after the effective date of this regulation." New California dischargers are "required to comply immediately upon commencement of discharge with effluent limitations derived from the criteria in this rule." The facility must also meet all permit conditions in the shortest feasible time (not to exceed 90 days)." The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP) states "[c]ompliance schedules shall not be allowed in permits for new dischargers." SIP at 2.1, page 20. Since the Discharger has not <u>legally</u> discharged, it is a new discharge.

2. The proposed Permit is based on an incomplete Report of Waste Discharge (RWD) and in accordance with Federal Regulations 40 CFR 122.21(e) and (h) and 124.3 (a)(2) the State's *Policy for Implementation of Toxics standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP) and California Water Code Section 13377 the permit should not be issued until the discharge is fully characterized and a protective permit can be written.

The "new" discharge has not been characterized for California Toxics Rule (CTR), National Toxics Rule (NTR) and other pollutants that could degrade the beneficial uses of the receiving stream and exceed water quality standards and objectives. The proposed Permit, Special Studies 2a, states in part that: "there are indications that the discharge may contain constituents that have a reasonable potential to cause or contribute to an exceedance of water quality objectives (CTR, NTR constituents (priority pollutants) and additional constituents…" and requires the Discharger characterize the quality of the discharge within 21 months following permit adoption. This is a "new" discharge of waste to surface waters, which has not been adequately characterized. The Regional Board is establishing a dangerous precedence in allowing this "new" uncharacterized discharge to continue which is contrary to the spirit of Federal Regulation 40 CFR 122.41(c) that states that the need to halt an activity is not a defense for noncompliance.

Federal Regulation, 40 CFR 122.21(e) states in part that: "The Director shall not issue a permit before receiving a complete application for a permit except for NPDES general permits. In accordance with 40 CFR 122.21 (e) and (h) and 124.3 (a)(2) the Regional Board shall not adopt the proposed permit without first a complete application,

in this case for industrial or commercial fishery, for which the permit application requirements are extensive. An application for a permit is complete when the Director receives an application form and any supplemental information which are completed to his or her satisfaction. The completeness of any application for a permit shall be judged independently of the status of any other permit application or permit for the same facility or activity."

State Report of Waste Discharge form 200 is required as a part of a complete Report of Waste Discharge. Form 200, part VI states that: "To be approved, your application must include a complete characterization of the discharge." The Federal Report of Waste Discharge forms also require a significant characterization of a wastewater discharge. Federal Application Form 2A, which is required for completion of a Report of Waste Discharge for municipalities, Section B.6, requires that Dischargers whose flow is greater than 0.1 mgd, must submit sampling data for ammonia, chlorine residual, dissolved oxygen, total kjeldahl nitrogen, nitrate plus nitrite nitrogen, oil an grease, phosphorus and TDS. Federal Application Form 2A, Section D, requires that Discharger's whose flow is greater than 1.0 mgd, conduct priority pollutant sampling. Federal Regulation, 40 CFR 122.21(g)(7) requires for existing manufacturing, commercial or mining facilities that a significant list of priority pollutants be sampled to characterize the effluent discharge. This has not been completed.

As the proposed Permit states, the California Toxics Rule (CTR)(40 CFR 131, Water Quality Standards) contains water quality standards applicable to this wastewater discharge. The final due date for compliance with CTR water quality standards for all wastewater dischargers in California is May 2010. The State's *Policy for Implementation of Toxics standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP), Section 1.2, requires wastewater dischargers to provide all data and other information requested by the Regional Board before the issuance, reissuance, or modification of a permit to the extent feasible.

Federal Regulation, 40 CFR 122.21(e) states in part that: "The Director shall not issue a permit before receiving a complete application for a permit except for NPDES general permits.

California Water Code, section 13377, requires that: "Notwithstanding any other provision of this division, the state board and the regional boards shall, as required or authorized by the Federal Water Pollution Control Act, as amended, issue waste discharge and dredged or fill material permits which apply and ensure compliance with all applicable provisions of the act and acts amendatory thereof or supplementary, thereto, together with any more stringent effluent standards or limitations necessary to implement water quality control plans, or for the protection of beneficial uses, or to prevent nuisance." The application for permit renewal is incomplete and in accordance with 40 CFR 122.21(e) the Regional Board should not issue a permit.

3. The proposed Permit is based on an inadequate California Environmental Quality Act (CEQA) document.

The proposed Permit, Finding E, states that: "The Regional Board has considered the Negative Declaration, which declares that adoption of this Order will have no significant impacts to water quality or the environment." The proposed Permit however finds that the Discharger will be unable to comply with Effluent Limitations for arsenic, nitrate and manganese and a Cease and Desist Order (CDO) is proposed to be adopted along with the permit. In addition, as is stated in the previous comment, the discharge has not been characterized for California Toxics Rule (CTR), National Toxics Rule (NTR) and other pollutants. Full compliance with the arsenic and nitrate limitation is proposed for 1 March 2012, 5 years away. The CDO does not contain a final compliance date for manganese. The discharge has not been characterized for priority pollutants and according to the proposed Permit "…may contain constituents that have a reasonable potential to cause or contribute to an exceedance of water quality objectives (CTR, NTR constituents (priority pollutants) and additional constituents…". A negative declaration is not adequate to address the known and unknown water quality impacts of this "new" discharge. A complete environmental impact report (EIR) must be completed to address the water quality of the discharge, following complete characterization, and a timely means of compliance.

4. The proposed Permit contains a flawed Antidegradation Policy analysis for a "new" facility that does not comply with the Board's Antidegradation Policy, Federal Antidegradation Regulations and the Clean Water Act.

The antidegradation analysis in the proposed Permit is simply deficient. The brief discussion of antidegradation requirements, in the Findings and Fact Sheet, consist only of skeletal, unsupported, undocumented conclusory statements totally lacking in factual analysis. In the proposed Permit the Regional Board establishes an unparalleled level of absurdity in stating that because Sterling Caviar has discharged illegally for a period of time; the discharge of waste to surface water does not constitute a "new" discharge. In support that the discharge is "new" the proposed Permit itself states in Finding No. O that: "This is a new permit, therefore anti-backsliding provisions do not apply."

The antidegradation policy discussion states that compliance with the proposed permit will require the discharger provide best practicable treatment and control of the discharge (BPTC). The proposed Permit does not discuss that the Discharger does not currently provide BPTC as evidenced by the fact that the discharge cannot immediately comply with discharge limitations (an accompanying Cease and Desist Order is proposed with a 5-year compliance schedule). In addition, the discharge has not been characterized for priority pollutants; therefore Regional Board staff does not know whether the discharge will be compliant with water quality standards and objectives. Contrary to good engineering and BPTC requirements the proposed Permit actually indicates "The solid waste removed by the drum filters is reintroduced into the wastewater flow prior to discharge." To reach a conclusion that the Discharger provides BPTC, for a noncompliant discharge that has not been fully characterized and reintroduces waste after it has been removed from the wastestream, is at best irresponsible.

The proposed Permit refers to the Fact Sheet for discussion of the Antidegradation Policy. The Fact Sheet, D4 page F-26, simply states that: "Since the Discharger has been discharging for **xx** years without an NPDES permit, this Order does not provide for an increase in the volume and mass of pollutants discharged. However, an antidegradation analysis was performed for the existing discharge to ensure the highest water quality consistent with the maximum benefit to the people of the State will be maintained." The failure to undertake a rigorous antidegradation analysis for a new discharge of pollutants is appalling.

Section 101(a) of the Clean Water Act, the basis for the antidegradation policy, states that the objective of the Act is to "restore and maintain the chemical, biological and physical integrity of the nation's waters." Section 303(d)(4) of the Act carries this further, referring explicitly to the need for states to satisfy the antidegradation regulations at 40 CFR § 131.12 before taking action to lower water quality. These regulations describe the federal antidegradation policy and dictate that states must adopt both a policy at least as stringent as the federal policy as well as implementing procedures. (40 CFR § 131.12(a).)

California's antidegradation policy is composed of both the federal antidegradation policy and the State Board's Resolution 68-16. (State Water Resources Control Board, Water Quality Order 86-17, p. 20 (1986) ("Order 86-17); Memorandum from William Attwater, SWRCB to Regional Board Executive Officers, "federal Antidegradation Policy," pp. 2, 18 (Oct. 7, 1987) ("State Antidegradation Guidance").) As part of the state policy for water quality control, the antidegradation policy is binding on all of the Regional Boards. (Water Quality Order 86-17, pp. 17-18.) Implementation of the state's antidegradation policy is guided by the State Antidegradation Guidance, SWRCB Administrative Procedures Update 90-004, 2 July 1990 ("APU 90-004") and USEPA Region IX, "Guidance on Implementing the Antidegradation Provisions of 40 CFR 131.12" (3 June 1987) (" Region IX Guidance"), as well as Water Quality Order 86-17.

The Regional Board must apply the antidegradation policy whenever it takes an action that will lower water quality. (State Antidegradation Guidance, pp. 3, 5, 18, and Region IX Guidance, p. 1.) Application of the policy does not depend on whether the action will actually impair beneficial uses. (State Antidegradation Guidance, p. 6. Actions that trigger use of the antidegradation policy include issuance, re-issuance, and modification of NPDES and Section 404 permits and waste discharge requirements, waiver of waste discharge requirements, issuance of variances, relocation of discharges, issuance of cleanup and abatement orders, increases in discharges due to industrial production and/or municipal growth and/other sources, exceptions from otherwise applicable water quality objectives, etc. (State Antidegradation Guidance, pp. 7-10, Region IX Guidance, pp. 2-3.) Both the state and federal policies apply to point and nonpoint source pollution. (State Antidegradation Guidance p. 6, Region IX Guidance, p. 4.)

The federal antidegradation regulations delineate three tiers of protection for waterbodies. Tier 1, described in 40 CFR § 131.12(a)(1), is the floor for protection of all waters of the United States. (48 Fed. Reg. 51400, 51403 (8 Nov. 1983); Region IX Guidance, pp. 1-2; APU 90-004, pp. 11-12.) It states that "[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." Uses are "existing" if they were actually attained in the water body on or after November 28, 1975, or if the water quality is suitable to allow the use to occur, regardless of whether the use was actually designated. (40 CFR § 131.3(e).) Tier 1 protections apply even to those waters already impacted by pollution and identified as impaired. In other words, already impaired waters cannot be further impaired.

Tier 2 waters are provided additional protections against unnecessary degradation in places where the levels of water quality are better than necessary to support existing uses. Tier 2 protections strictly prohibit degradation unless the state finds that a degrading activity is: 1) necessary to accommodate important economic or social development in the area, 2) water quality is adequate to protect and maintain existing beneficial uses, and 3) the highest statutory and regulatory requirements and best management practices for pollution control are achieved. (40 CFR § 131.12(a)(2).) Cost savings to a discharger alone, absent a demonstration by the project proponent as to how these savings are "necessary to accommodate important economic or social development in the area," are not adequate justification for allowing reductions in water quality. (Water Quality Order 86-17, p. 22; State Antidegradation Guidance, p. 13.) If the waterbody passes this test and the degradation is allowed, degradation must not impair existing uses of the waterbody. (48 Fed. Reg. at 51403). Virtually all waterbodies in California may be Tier 2 waters since the state, like most states, applies the antidegradation policy on a parameter-by-parameter basis, rather than on a waterbody basis. (APU 90-004, p. 4). Consequently, a request to discharge a particular chemical to a river, whose level of that chemical was better than the state standards, would trigger a Tier 2 antidegradation review even if the river was already impaired by other chemicals.

Tier 3 of the federal antidegradation policy states "[w]here high quality waters constitute an outstanding national resource, such as waters of national and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water shall be maintained and protected. (40 CFR § 131.12(a)(3).) These Outstanding National Resource Waters (ONRW) are designated either because of their high quality or because they are important for another reason. (48 Fed. Reg. At 51403; State Antidegradation Guidance, p. 15). No degradation of water quality is allowed in these waters other than short-term, temporary changes. (Id.) Accordingly, no new or increased discharges are allowed in either ONRW or tributaries to ONRW that would result in lower water quality in the ONRW. (EPA Handbook, p. 4-10; State Antidegradation Guidance, p. 15.) Existing antidegradation policy already dictates that if a waterbody "should be" an ONRW, or "if it can be argued that the waterbody in question deserves the same treatment {as a formally designated ONRW]," then it must be treated as such, regardless of formal designation. (State Antidegradation Guidance, pp. 15-16; APU 90-004, p. 4.) Thus the Regional Board is required in each antidegradation analysis to consider whether the waterbody at issue should be treated as an ONRW. It should be

reiterated that waters cannot be excluded from consideration as an ONRW simply because they are already "impaired" by some constituents. By definition, waters may be "outstanding" not only because of pristine quality, but also because of recreational significance, ecological significance or other reasons. (40 CFR §131.12(a)(3).) Waters need not be "high quality" for every parameter to be an ONRW. (APU 90-004, p. 4) For example, Lake Tahoe is on the 303(d) list due to sediments/siltation and nutrients, and Mono Lake is listed for salinity/TDC/chlorides but both are listed as ONRW.

The State Board's APU 90-004 specifies guidance to the Regional Boards for implementing the state and federal antidegradation policies and guidance. The guidance establishes a two-tiered process for addressing these policies and sets forth two levels of analysis: a simple analysis and a complete analysis. A simple analysis may be employed where a Regional Board determines that: 1) a reduction in water quality will be spatially localized or limited with respect to the waterbody, e.g. confined to the mixing zone; 2) a reduction in water quality is temporally limited; 3) a proposed action will produce minor effects which will not result in a significant reduction of water quality; and 4) a proposed activity has been approved in a General Plan and has been adequately subjected to the environmental and economic analysis required in an EIR. A complete antidegradation analysis is required if discharges would result in: 1) a substantial increase in mass emissions of a constituent; or 2) significant mortality, growth impairment, or reproductive impairment of resident species. Regional Boards are advised to apply stricter scrutiny to non-threshold constituents, i.e., carcinogens and other constituents that are deemed to present a risk of source magnitude at all non-zero concentrations. If a Regional Board cannot find that the above determinations can be reached, a complete analysis is required.

This is a new discharge of pollutants to surface waters. Even a minimal antidegradation analysis would require an examination of: 1) existing applicable water quality standards; 2) ambient conditions in receiving waters compared to standards; 3) incremental changes in constituent loading, both concentration and mass; 4) treatability; 5) best practicable treatment and control (BPTC); 6) comparison of the proposed increased loadings relative to other sources; 7) an assessment of the significance of changes in ambient water quality and 8) whether the waterbody was a ONRW. A minimal antidegradation analysis must also analyze whether: 1) such degradation is consistent with the maximum benefit to the people of the state; 2) the activity is necessary to accommodate important economic or social development in the area; 3) the highest statutory and regulatory requirements and best management practices for pollution control are achieved; and 4) resulting water quality is adequate to protect and maintain existing beneficial uses. A BPTC technology analysis must be done on an individual constituent basis; while tertiary treatment may provide BPTC for pathogens, dissolved metals may simply pass through.

Any antidegradation analysis must comport with implementation requirements in State Board Water Quality Order 86-17, State Antidegradation Guidance, APU 90-004 and Region IX Guidance. The conclusory, unsupported, undocumented statements in the Permit are no substitute for a defensible antidegradation analysis.

The antidegradation review process is especially important in the context of waters protected by Tier 2. See EPA, Office of Water Quality Regulations and Standards, Water Quality Standards Handbook, 2nd ed. Chapter 4 (2nd ed. Aug. 1994). Whenever a person proposes an activity that may degrade a water protected by Tier 2, the antidegradation regulation requires a state to: (1) determine whether the degradation is "necessary to accommodate important economic or social development in the area in which the waters are located"; (2) consider less-degrading alternatives; (3) ensure that the best available pollution control measures are used to limit degradation; and (4) guarantee that, if water quality is lowered, existing uses will be fully protected. 40 CFR § 131.12(a)(2); EPA, Office of Water Quality Regulations and Standards, Water Quality Standards Handbook, 2nd ed. 4-1, 4-7 (2nd ed. Aug. 1994). These activity-specific determinations necessarily require that each activity be considered individually.

For example, the APU 90-004 states:

> "Factors that should be considered when determining whether the discharge is necessary to accommodate social or economic development and is consistent with maximum public benefit include: a) past, present, and probably beneficial uses of the water, b) economic and social costs, tangible and intangible, of the proposed discharge compared to benefits. The economic impacts to be considered are those incurred in order to maintain existing water quality. The financial impact analysis should focus on the ability of the facility to pay for the necessary treatment. The ability to pay depends on the facility's source of funds. In addition to demonstrating a financial impact on the publicly – or privately – owned facility, the analysis must show a significant adverse impact on the community. The long-term and short-term socioeconomic impacts of maintaining existing water quality must be considered. Examples of social and economic parameters that could be affected are employment, housing, community services, income, tax revenues and land value. To accurately assess the impact of the proposed project, the projected baseline socioeconomic profile of the affected community without the project should be compared to the projected profile with the project…EPA's Water Quality Standards Handbook (Chapter 5) provides additional guidance in assessing financial and socioeconomic impacts"

There is nothing resembling an economic or socioeconomic analysis in the proposed Permit. There are viable alternatives that have never been analyzed. The evaluation contains no comparative costs. As a rule-of-thumb, USEPA recommends that the cost of compliance should not be considered excessive until it consumes more than 2% of disposable household income in the region. This threshold is meant to suggest more of a floor than a ceiling when evaluating economic impact. In the Water Quality Standards Handbook, USEPA interprets the phrase "necessary to accommodate important

economic or social development" with the phrase "substantial and widespread economic and social impact."

The antidegradation analysis must discuss the relative economic burden as an aggregate impact across the entire region using macroeconomics. Considering the intrinsic value of the Delta to the entire state and the potential effects upon those who rely and use Delta waters, it must also evaluate the economic and social impacts to water supply, recreation, fisheries, etc. from the Discharger's degradation of water quality in the Delta. Nor has the case been made that there is no alternative for necessary housing other than placing it where its wastewater must discharge directly into sensitive but seriously degraded waters. It is unfortunate that the agency charged with implementing the Clean Water Act has apparently decided it is more important to protect the polluter than the environment.

There is nothing in the Permit resembling an alternatives analysis evaluating less damaging and degrading alternatives. Unfortunately, the Permit fails to evaluate and discuss why there is no alternative other than discharging to surface waters. Other communities have successfully disposed of wastes without discharging additional pollutants to degraded rivers. The discharger certainly has the option of purchasing offsets. A proper alternatives analysis would cost out various alternatives and compare each of the alternatives' impacts on beneficial uses.

There is nothing in the Permit resembling an analysis that ensures that existing beneficial uses are protected. Nor does the Permit analyze the incremental and cumulative impact of increased loading of non-impairing pollutants on beneficial uses. In fact, there is no information or discussion on the composition and health of the identified beneficial uses. Any reasonably adequate antidegradation analysis must discuss the affected beneficial uses (i.e., numbers and health of the aquatic ecosystem; extent, composition and viability of agricultural production; people depending upon these waters for water supply; extent of recreational activity; etc.) and the probable effect the discharge will have on these uses.

Alternatively, Tier 1 requires that existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected. By definition, any increase in the discharge of impairing pollutants to impaired waterways unreasonably degrades beneficial uses and exceeds applicable water quality standards. Prohibition of additional mass loading of impairing pollutants is a necessary stabilization precursor to any successful effort in bringing an impaired waterbody into compliance.

The State Board has clearly articulated its position on increased mass loading of impairing pollutants. In Order WQ 90-05, the Board directed the San Francisco Regional Board on the appropriate method for establishing mass-based limits that comply with state and federal antidegradation policies. That 1990 order stated "[I]n order to comply with the federal antidegradation policy, the mass loading limits should also be revised, based on mean loading, concurrently with the adoption of revised effluent limits. The [mass] limits should be calculated by multiplying the [previous year's] annual mean

effluent concentration by the [four previous year's] annual average flow. (Order WQ 90-05, p. 78). USEPA points out, in its 12 November 1999 objection letter to the San Francisco Regional Board concerning Tosco's Avon refinery, that '[a]ny increase in loading of a pollutant to a water body that is impaired because of that pollutant would presumably degrade water quality in violation of the applicable antidegradation policy."

NPDES permits must include any more stringent effluent limitation necessary to implement the Regional Board Basin Plan (Water Code 13377). The proposed Permit fails to properly implement the Basin Plan's Antidegradation Policy. The discharge must be capable of achieving 100% compliance with Effluent and Receiving Water Limitations prior to allowing the new discharge.

5. The proposed Permit fails to contain an Effluent Limitation for acute toxicity that allows mortality that exceeds the Basin Plan water quality objective and does not comply with Federal regulations, at 40 CFR 122.44 (d)(1)(i).

Federal regulations, at 40 CFR 122.44 (d)(1)(i), require that limitations must control all pollutants or pollutant parameters which the Director determines are or may be discharged at a level which will cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality. The Water Quality Control Plan for the Sacramento/ San Joaquin River Basins (Basin Plan), Water Quality Objectives (Page III-8.00) for Toxicity is a narrative criteria which states that all waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This section of the Basin Plan further states, in part that, compliance with this objective will be determined by analysis of indicator organisms. The proposed Permit Fact Sheet states that toxicity limitations are not included because a chemical-specific approach is being undertaken for aquaculture drugs and chemicals. Even if one accepts this explanation, this does not account for other priority pollutants in the discharge, ammonia, or the fact that waste removed by the drum filters is reintroduced into the wastewater flow prior to discharge. Since the discharge has not been fully characterized for priority pollutants, a chemical specific approach fails any reasonable test of adequacy. The proposed Permit and MRP do not require monitoring for acute toxicity. The proposed Permit does not contain an Effluent Limitation for acute toxicity and does not comply with 40 CFR 122.44 (d)(1)(i).

6. The proposed Permit does not contain Effluent Limitations for chronic toxicity and therefore does not comply with Federal regulations, at 40 CFR 122.44 (d)(1)(i).

Federal regulations, at 40 CFR 122.44 (d)(1)(i), require that limitations must control all pollutants or pollutant parameters which the Director determines are or may be discharged at a level which will cause, or contribute to an excursion above any State water quality standard, including state narrative criteria for water quality. The Water Quality Control Plan for the Sacramento/ San Joaquin River Basins (Basin Plan), Water Quality Objectives (Page III-8.00) for Toxicity is a narrative criteria which states that all

waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. The proposed Permit and MRP do not require monitoring for chronic toxicity. The proposed Permit does not contain an Effluent Limitation for chronic toxicity and does not comply with 40 CFR 122.44 (d)(1)(i). Accordingly, the Order must be revised to prohibit chronic toxicity in accordance with Federal regulations.

7. The proposed Permit does not contain Effluent Limitations for total suspended solids (TSS) and therefore does not comply with Federal regulations, at 40 CFR 122.44 (d)(1)(i).

Federal regulations, at 40 CFR 122.44 (d)(1)(i), require that limitations must control all pollutants or pollutant parameters which the Director determines are or may be discharged at a level which will cause, or contribute to an excursion above any State water quality standard, including state narrative criteria for water quality. The proposed Permit finds there is a reasonable potential for the discharge to exceed the Basin Plan water quality objective for suspended solids. Contrary to good engineering and BPTC requirements the proposed Permit actually indicates "The solid waste removed by the drum filters is reintroduced into the wastewater flow prior to discharge." Intentional acts by the Discharger, reintroducing solid waste, present a threat to water quality. The proposed Permit fails to contain an Effluent Limitation for TSS, but instead requires the implementation of best management practices. The implementation of BMPs does not comply with 40 CFR 122.44 (d)(1)(i). The proposed Permit must be modified to contain a numeric Effluent Limitation for TSS.

8. The Discharger adds the antibiotic Oxyeteracycline to fish food which in turn is discharged to surface waters. The Order does not contain an Effluent Limitation for Oxyeteracycline which violates Federal Regulation, 40 CFR 122.4 (a), (d) and (g).

There is significant literature recently regarding the wastewater discharge of antibiotics and their significant impact on the environment. However the permit contains no limitations that preclude the Discharger from using and discharging this antibiotic at high concentrations. There are no limitations in the Order that limit the concentration of Oxyeteracycline discharged from the Discharger's facility. There is also no verification that the numbers developed by DFG are in any way safe for surface waters and aquatic life beneficial uses. The allowance for the Discharger to use this antibiotic with limitation is contrary to Federal Regulation, 40 CFR 122.4 (a), (d) and (g) require that no permit may be issued when the conditions of the permit do not provide for compliance with the applicable requirements of the CWA, or regulations promulgated under the CWA, when imposition of conditions cannot ensure compliance with applicable water quality requirements and for any discharge inconsistent with a plan or plan amendment approved under Section 208(b) of the CWA.

9. The proposed Permit does not contain Effluent Limitations for ammonia and therefore does not comply with Federal regulations, at 40 CFR 122.44 (d)(1)(i) and (ii).

Federal regulations, at 40 CFR 122.44 (d)(1)(i), require that limitations must control all pollutants or pollutant parameters which the Director determines are or may be discharged at a level which will cause, or contribute to an excursion above any State water quality standard, including state narrative criteria for water quality. Ammonia is a toxic substance. The Basin Plan contains a narrative objective prohibiting the discharge of toxic constituents that cause toxic conditions. The Fact Sheet, page F-17, discussion of ammonia concludes that the chronic criterion for ammonia is 1.4 mg/l based on pH and temperatures. A single sample for ammonia from the effluent was 1.2 mg/l. Federal regulations, 40 CFR § 122.44(d)(1)(ii), state "when determining whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a State water quality standard, the permitting authority shall use procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water." The reasonable potential analyses for ammonia failed to consider the statistical variability of data and laboratory analyses as explicitly required by the federal regulations. Considering the statistical variability of ammonia, using the recommended procedures in the technical support document for toxics control (TSD) or any reasonable statistical procedure, results in a reasonable potential for ammonia to cause toxicity in the receiving stream exceeding the narrative toxicity objective. The proposed Permit must be amended to contain an Effluent Limitation for ammonia.

10. The proposed Permit contains a flawed reasonable potential analysis for electrical conductivity (EC) and total dissolved solids (TDS) and does not comply with Federal regulations, at 40 CFR 122.44 (d)(1)(i) and (ii).

The proposed Permit Fact Sheet, Salinity discussion pages F-21 and 22, states that since chloride is limited in the proposed Permit, EC and TDS will be effectively controlled. Federal regulations, at 40 CFR 122.44 (d)(1)(i), require that limitations must control all pollutants or pollutant parameters which the Director determines are or may be discharged at a level which will cause, or contribute to an excursion above any State water quality standard, including state narrative criteria for water quality. Federal regulations, 40 CFR § 122.44(d)(1)(ii), state "when determining whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a State water quality standard, the permitting authority shall use procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water." The reasonable potential analyses for ammonia failed to consider the statistical variability of data and laboratory analyses as explicitly required by the federal regulations. Both EC

and TDS have secondary drinking water maximum contaminant levels (MCLs) incorporated into the Basin Plan Chemical Constituents water quality objective by reference. While the Regional Board staff's conclusions are correct that chloride, EC and TDS are directly related, there is no evidence in the record that confirms that EC and TDS will be effectively controlled to levels below the MCLs. Even if the limit for chloride were shown to reduce EC and TDS levels, inclusion of an Effluent Limitation for chloride does not satisfy the Federal regulatory requirement for Effluent Limitations for EC and TDS. The proposed Permit must be amended to contain Effluent Limitations for EC and TDS.

11. The proposed Permit Effluent Limitations are not limited for mass contrary to Federal Regulations and advise from U.S.EPA.

Section 5.7.1 of U.S. EPA's *Technical Support Document for Water Quality Based Toxics Control* (TSD, EPA/505/2-90-001) states with regard to mass-based Effluent Limits: "Mass-based effluent limits are required by NPDES regulations at 40 CFR 122.45(f). The regulation requires that all pollutants limited in NPDES permits have limits, standards, or prohibitions expressed in terms of mass with three exceptions, including one for pollutants that cannot be expressed appropriately by mass. Examples of such pollutants are pH, temperature, radiation, and whole effluent toxicity. Mass limitations in terms of pounds per day or kilograms per day can be calculated for all chemical-specific toxics such as chlorine or chromium. Mass-based limits should be calculated using concentration limits at critical flows. For example, a permit limit of 10 mg/l of cadmium discharged at an average rate of 1 million gallons per day also would contain a limit of 38 kilograms/day of cadmium.

Mass based limits are particularly important for control of bioconcentratable pollutants. Concentration based limits will not adequately control discharges of these pollutants if the effluent concentrations are below detection levels. For these pollutants, controlling mass loadings to the receiving water is critical for preventing adverse environmental impacts.

However, mass-based effluent limits alone may not assure attainment of water quality standards in waters with low dilution. In these waters, the quantity of effluent discharged has a strong effect on the instream dilution and therefore upon the RWC. At the extreme case of a stream that is 100 percent effluent, it is the effluent concentration rather than the mass discharge that dictates the instream concentration. Therefore, EPA recommends that permit limits on both mass and concentration be specified for effluents discharging into waters with less than 100 fold dilution to ensure attainment of water quality standards."

Federal Regulations, 40 CFR 122.45 (f), states the following with regard to mass limitations:

> "(1) all pollutants limited in permits shall have limitations, standards, or prohibitions expressed in terms of mass except:

For pH, temperature, radiation or other pollutants which cannot be expressed by mass; When applicable standards and limitation are expressed in terms of other units of measurement; or If in establishing permit limitations on a case-by-case basis under 125.3, limitations expressed in terms of mass are infeasible because the mass of the pollutant discharged cannot be related to a measure of operation (for example, discharges of TSS from certain mining operations), and permit conditions ensure that dilution will not be used as a substitute for treatment.

(2) Pollutants limited in terms of mass additionally may be limited in terms of other units of measurement, and the permit shall require the permittee to comply with both limitations."

TMDLs represent a mass loading that may occur over a given time period to attain and maintain water quality standards. Mass loadings from discharges are critical to determining individual discharger allocations once a TMDL has been completed.

In addition to the above citations, on June 26th 2006 U.S. EPA, Mr. Douglas Eberhardt, Chief of the CWA Standards and Permits Office, sent a letter to Dave Carlson at the Central Valley Regional Water Quality Control Board strongly recommending that NPDES permit effluent limitations be expressed in terms of mass as well as concentration. The proposed Permit must be amended to include mass limitations in addition to concentration based Effluent Limitations.

12. The proposed Permit does not comply with the Board's Antidegradation Policy by failing to require an assessment of groundwater quality.

The proposed Permit shows that the Discharger utilizes land disposal via "percolation" in the wetlands, and does not detail whether the fish rearing ponds are unlined also allowing percolation of pollutants to groundwater. It is highly that the ponds and wetlands are located on highly permeable river sediments. Wastewater will percolate to groundwater. The percolation of wastewater to groundwater poses a threat to degrade water quality.

California's antidegradation policy is composed the State Board's Resolution 68-16 which is included as a part of the Basin Plan. As part of the state policy for water quality control, the antidegradation policy is binding on all of the Regional Boards. Implementation of the state's antidegradation policy is guided by the State Antidegradation Guidance, SWRCB Administrative Procedures Update 90-004, 2 July 1990 ("APU 90-004") and Water Quality Order 86-17.

The Regional Board must apply the antidegradation policy whenever it takes an action that will lower water quality. (State Antidegradation Guidance, pp. 3, 5, 18) Application of the policy does not depend on whether the action will actually impair beneficial uses. (State Antidegradation Guidance, p. 6. Actions that trigger use of the

antidegradation policy include issuance, re-issuance, and modification of NPDES and Section 404 permits and waste discharge requirements, waiver of waste discharge requirements, issuance of variances, relocation of discharges, issuance of cleanup and abatement orders, increases in discharges due to industrial production and/or municipal growth and/other sources, exceptions from otherwise applicable water quality objectives, etc. (State Antidegradation Guidance, pp. 7-10) The State Board's APU 90-004 specifies guidance to the Regional Boards for implementing the state antidegradation policy and guidance. The guidance establishes a two-tiered process for addressing these policies and sets forth two levels of analysis: a simple analysis and a complete analysis. A simple analysis may be employed where a Regional Board determines that: 1) a reduction in water quality will be spatially localized or limited with respect to the waterbody, e.g. confined to the mixing zone; 2) a reduction in water quality is temporally limited; 3) a proposed action will produce minor effects which will not result in a significant reduction of water quality; and 4) a proposed activity has been approved in a General Plan and has been adequately subjected to the environmental and economic analysis required in an EIR. A complete antidegradation analysis is required if discharges would result in: 1) a substantial increase in mass emissions of a constituent; or 2) significant mortality, growth impairment, or reproductive impairment of resident species. Regional Boards are advised to apply stricter scrutiny to non-threshold constituents, i.e., carcinogens and other constituents that are deemed to present a risk of source magnitude at all non-zero concentrations. If a Regional Board cannot find that the above determinations can be reached, a complete analysis is required.

Even a minimal antidegradation analysis would require an examination of: 1) existing applicable water quality standards; 2) ambient conditions in receiving waters compared to standards; 3) incremental changes in constituent loading, both concentration and mass; 4) treatability; 5) best practicable treatment and control (BPTC); 6) comparison of the proposed increased loadings relative to other sources; 7) an assessment of the significance of changes in ambient water quality and 8) whether the waterbody was a ONRW. A minimal antidegradation analysis must also analyze whether: 1) such degradation is consistent with the maximum benefit to the people of the state; 2) the activity is necessary to accommodate important economic or social development in the area; 3) the highest statutory and regulatory requirements and best management practices for pollution control are achieved; and 4) resulting water quality is adequate to protect and maintain existing beneficial uses.

The proposed action is for renewal of an NPDES permit. Although the applicable provisions being discussed for land disposal are not federally mandated, an antidegradation analysis is required. Any antidegradation analysis must comport with implementation requirements in State Board Water Quality Order 86-17 and State Antidegradation Guidance. The discharge of wastewater to unlined ponds and the wetlands at a minimum threatens groundwater quality, mandating monitoring of groundwater quality to determine if degradation has occurred and to what degree. Groundwater monitoring must be required to determine if the wastewater discharge is degrading groundwater quality.

13. The Discharger is not providing BAT contrary to Federal Regulations and the Clean Water Act.

The proposed Permit states that the Discharger provides best practicable treatment and control of the discharge (BPTC), yet the discharge is currently non-compliant with the proposed limitations and has not been characterized for priority pollutants. Contrary to good engineering and BPTC requirements the proposed Permit actually indicates, "The solid waste removed by the drum filters is reintroduced into the wastewater flow prior to discharge." The ultimate goal of the Federal Clean Water Act as expressed in Section 101 is the elimination of the discharge of pollutants into navigable waters by 1985. The Act throughout, places an emphasis on the control and reduction of the discharge of pollutants by point sources as interim goals. Technology based effluent limitations are required by Section 301 of the Act for all point sources. A standard of "best available technology" (BPT) is required by 1977, and a more stringent standard of "best available technology" (BAT) is required by 1983 for industrial point sources. For publicly owned treatment works (POTWs), secondary treatment is required by 1977 and "best practicable treatment" (BPT) by 1983. Best practicable treatment and control (BPTC) is also required by the State and Regional Board's Antidegradation Policy (Resolution 68-16).

Thank you for considering these comments. If you have questions or require clarification, please don't hesitate to contact us.

Sincerely,

Bill Jennings, Executive Director
California Sportfishing Protection Alliance